

**From:** [Lidgard, Michael](#)  
**To:** [Burgess, Karen](#)  
**Subject:** FW: Deliberative - JBLM, PBDEs, and Sediments  
**Date:** Monday, May 15, 2017 3:15:28 PM  
**Attachments:** [ecblank.gif](#)  
[doclink.gif](#)  
[graycol.gif](#)  
[image001.png](#)  
[image002.png](#)  
[image003.png](#)  
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[image005.png](#)  
[image006.png](#)

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**From:** Michael Lidgard [mailto:Lidgard.Michael@epamail.epa.gov]  
**Sent:** Monday, May 15, 2017 2:23 PM  
**To:** Lidgard, Michael <Lidgard.Michael@epa.gov>  
**Subject:** Fw: Deliberative - JBLM, PBDEs, and Sediments

----- Forwarded by Michael Lidgard/R10/USEPA/US on 05/15/2017 02 23 PM -----

From: Tonya Lane/R10/USEPA/US  
To: Michael Lidgard/R10/USEPA/US@EPA,  
Cc: Courtney Weber/R10/USEPA/US@EPA, Hanh Shaw/R10/USEPA/US@EPA  
Date: 09/23/2011 11 34 AM  
Subject: Deliberative - JBLM, PBDEs, and Sediments

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Hi Mike,

Had a nice call with the National Marine Fisheries Service's Southwest WA Branch Chief Jeff Fisher today (b)(5)

attorney-  
client

Jeff said he might call you next week.

Tonya Lane  
U.S. Environmental Protection Agency  
Region 10  
1200 Sixth Avenue, OWW-130  
Seattle, WA 98101  
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425-649-7050

----- Forwarded by Tonya Lane/R10/USEPA/US on 09/23/2011 10:44 AM -----

**Re: Fw: outline of habitat assessment survey** ☐  
**Tonya Lane** to: Jeff Fisher  
Cc: Alison Agness, Lynne Barre, Teresa Mongillo, Tim Rymer

09/22/2011 09:43 AM

I'll give you a call today to clear some things up.

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☐ Re: Fw: outline of habitat assessment survey

**Re: Fw: outline of habitat assessment survey**

**Jeff Fisher** to: **Tonya Lane**  
Cc: Lynne Barre, Tim Rymer, Alison Agness, Teresa Mongillo

09/22/2011 09:34 AM

Hi Tonya,

The Ault field survey was not sufficient in its reporting to provide the characterization that is typical of subtidal habitat surveys conducted for permitting actions. Their focus was clearly geared towards outfall inspection with very limited habitat/species assessment. I am happy to discuss what was good and not so good about that work as it relates to our purposes, though I think the outline of the protocol I provided shows how they differed and where they were similar.

While I do indeed have an ex SEAL diver in my branch; and personally have much experience in doing this type of survey work, it is unprecedented for NOAA to do the work of the applicant for such projects. Further, it is perplexing to me that JBLM should balk at the cost of the survey when, for example, every private party putting in a dock--with certainly less where-with-all than the U.S. military--is required to do so. The request is further disconcerting by the lack of acceptance of submitting sediment samples for PBDE analyses, which, from a risk assessment paradigm, would provide the most unambiguous time-integrated information relative to whether chronic PBDE and metals discharge from the outfall is occurring at any rate that poses potential risks to listed species or their habitat. Perhaps there is a perception that such surveys are ridiculously expensive. They aren't, and I am happy to provide a short list of several contractors that routinely do such work at reasonable rates, similar to the ARI quote I provided earlier. That said, JBLM has their own environmental department, and their expertise I should think should at least be queried by the military divers to see if they can provide the requested support. We don't do the reporting for applicants on projects (unless of course, /we/ are the applicant, and are required to 'consult with ourselves' across divisions--which, odd as it sounds, occurs with some regularity). I am around this morning should you wish to discuss further.

Regards,

Jeff

[Lane.Tonya@epamail.epa.gov](mailto:Lane.Tonya@epamail.epa.gov) wrote:

>  
> Jeff,  
>  
> For cost reasons JBLM is likely to use military divers to do their  
> outfall inspection (maybe even the same divers who did the habitat  
> survey at Ault Field). Would NOAA be amenable to sending their own  
> diver to do (or to lead) the habitat survey part of the dive at JBLM?  
> Andrea LaTier mentioned that NOAA HCD has a former Navy SEAL on staff  
> who could probably bring you exactly the info you need. At the same  
> time, JBLM would presumably be happy to not have to write up a habitat  
> survey (because the info was collected directly by NOAA).  
>  
> Tonya  
>  
> ----- Forwarded by Tonya Lane/R10/USEPA/US on 09/19/2011 12:06 PM -----  
>  
>  
> \*Re: outline of habitat assessment survey\* Link  
>  
> <[Notes:///882574A200733982/DABA975B9FB113EB852564B5001283EA/EF500E83A71C7D94A10A162A15E1C7CC](https://www.epa.gov/epaospr/foia/882574A200733982/DABA975B9FB113EB852564B5001283EA/EF500E83A71C7D94A10A162A15E1C7CC)>  
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>  
> \*Tonya Lane \* to: Jeff Fisher  
> 09/16/2011 11:18 AM  
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> Jeff,  
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> I've forwarded your e-mail to my supervisors and to our Office of  
> Environmental Assessment for feedback. The level of detail is much  
> appreciated. Does this mean JBLM can't simply use the Ault Field  
> survey (which I admittedly have not reviewed myself) as a guide for  
> their own? In any case, the penmanship on that habitat survey  
> attachment is AMAZING.  
>  
> Tonya Lane  
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> \*outline of habitat assessment survey\*  
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>  
> \*Jeff Fisher \* to: Tonya Lane  
> 09/16/2011 09:50 AM  
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>  
> Cc: Teresa Mongillo, Alison Agness, Tim Rymer, Lynne Barre  
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>  
> Good morning Tonya,  
>  
> attached is a draft figure for the habitat survey we have discussed.  
> As depicted in the figure, three transects would be surveyed parallel to  
> the outfall pipe at 10, 125 and 240 ft increments on each side of the  
> diffuser (i.e., six total). These transects could be surveyed using  
> divers or underwater video with surface support. As conceptualized,  
> transects would begin 10 feet shore-ward of the chronic mixing zone and  
> extend 10 feet past the water-ward (outer) boundary. Total length of  
> the transects will be 690 feet. A stratified random sampling approach  
> is proposed to determine locations for sediment grab samples that could  
> be collected by divers (hand core [i.e., cylindrical sample jar provided  
> by lab] to 15 cm depth). Under this approach, the transect line would  
> be divided into three sections, with sections (strata) being 230 feet in  
> length. One stratified-random sample will be taken within each of these  
> strata, for a total of three samples collected on each transect line.  
> That is, within each strata on each transect, the sample location is  
> randomly chosen (e.g., using a random number generator to identify the  
> precise location within each strata to collect the sample). In lieu of  
> diver collected sediment samples, they could also be collected from the  
> surface using a Ponar or Van-Veen grab. Additional information to be  
> collected while surveying along the transect lines (at a height of about  
> 3-5 feet above the bottom, will include: elevation (depth), approximate  
> amount and species of macro algae, substrate composition, epibenthic  
> biota and number and species of fish. Depth will need to be calibrated  
> against the tidal condition during survey, so divers will need to record  
> their start and stop times and calibrate accordingly to local tidal  
> conditions (which can be obtained from NOAA's tidal station and charts  
> available on line  
> ([http://tidesandcurrents.noaa.gov/tide\\_predictions.shtml?gid=259](http://tidesandcurrents.noaa.gov/tide_predictions.shtml?gid=259)). This  
> information it typically recorded as a diver moves along the transect,  
> recording where along the transect substrate conditions change (e.g.,  
> from gravel to mud/silt) as well as where SAV is observed (and not)--the  
> concept being to identify where habitat conditions/features change.  
>  
> If numbers are high, it can be difficult to quantify fish precisely  
> using video or diver survey (esp. video because fish can easily be  
> double counted when moving in and out of view), so generally  
> semi-quantitative observations of fish are recorded and are acceptable.  
> We can discuss this aspect a bit more in terms of what would be  
> appropriate. I have personally used a system whereby species were  
> ranked in abundance (e.g., + = 1 to 10; ++ = 10-25; +++ = 25-50; ++++ =  
> 50 - 100; +++++ = > 100 [too numerous to count]). Divers should record  
> visibility, and survey for fish to the visibility limit that allows for  
> confidence in species identification. For benthic invertebrates, divers  
> should attempt to record what is observed within 1 meter either side of  
> the transect line. If species are super abundant (e.g., as hermit  
> crabs often are) they will be challenging to quantify without extensive  
> effort, and we are not looking for that level of detail, and a system as  
> i identified above for fish (i.e., to provide a semi-quantitative  
> interpretation of abundance by ranking) could be used. If species  
> numbers are low, divers should be able to record them all, separating  
> out numbers in final data reporting within each strata along the  
> transects to provide an index of abundance by depth and physical habitat  
> characteristics observed. Ultimately, species richness for  
> invertebrates and fish observed along each transect, and quantitative or  
> semi-quantitative measures of abundance within each strata along each  
> transect should be reportable from the survey results.  
>  
> I am happy to discuss this further on Monday morning (meetings most of  
> day today).  
>  
> Regards,  
>  
> Jeff  
> [attachment "JBLMoutallhabitatsurveyMap .pdf" deleted by Tonya  
> Lane/R10/USEPA/US] [attachment "jeff\_fisher.vcf" deleted by Tonya  
> Lane/R10/USEPA/US]  
[attachment "jeff\_fisher.vcf" deleted by Tonya Lane/R10/USEPA/US]